UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,650	10/05/2005	Peter Groche	000008-004	7130

44012 7590 04/12/2010

WRB-IP LLP
1217 KING STREET
ALEXANDRIA, VA 22314

EXAMINER	
PILKINGTON, JAMES	
ART UNIT	PAPER NUMBER
3656	

NOTIFICATION DATE	DELIVERY MODE
04/12/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

HARRY@WRB-IP.COM
angie@wrb-ip.com

Office Action Summary	Application No.	Applicant(s)	
	10/528,650	GROCHE ET AL.	
	Examiner	Art Unit	
	JAMES PILKINGTON	3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102 and/or 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13-19 and 24-29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jelenak, DT 2431935.

Jelenak clearly discloses all of the structural limitations of the device, as can be seen in Figure 2, including two projection flanges which are formed by a profiling gaps method which is depicted in Figures 3 and 4.

Jelenak does not explicitly state that the method results in the least one surface of the edge flanges having a greater hardness than a portion not worked upon by the method.

The method disclosed by Jelenak cuts the sheet metal and forms edge flanges by pressing the sheet metal, at the location of the cut, into shape which is a cold working process. The cold working of a metal material increases the hardness of the material (see attached document discussing cold working, in particular page 88 last

paragraph) at the location which the work was preformed and no where else along the member. The increase in the hardness at the work site is a result of the method being applied by Jelenak and increasing the hardness of a guiding element for a rolling member provides the predictable result of prolonging the useful life of the sliding assembly/arrangement

Claims 13-17, 19, 20, 24-27, 29 and 30 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Groche, DE 10039768 A1.

Regarding claims 13, 14, 19, 20, 29 and 30, Groche discloses a profiled guiding element (2) formed of sheet metal for guiding operations, comprising a piece of sheet metal (2) having two projecting edge flanges (2a and small portion to the left of 2a on the left side of 1) on a longitudinal edge thereof, the two projecting edge flanges being formed by a profiling gaps method (see Figure 1 which shows the apparatus which carries out the method) performed in the longitudinal edge, at least one surface of the profiled guiding element forming a guiding surface (surfaces of 2a and shorter left hand side guide 1) for at least rolling body (1), wherein at least one surface of the edge flanges forms the at least one guiding surface (see Figure 2), wherein the two edge flanges (2a and shorter left hand side) are arranged symmetrically [claims 19 and 29] to a plane in a center of the profiled guiding element (see Figure 1) or asymmetrically [claims 20 and 30] to a plane in the center of the profiled guiding element (see dashed line in Figure 2).

Groche does not explicitly state that the method results in the least one surface of the edge flanges having a greater hardness than a portion not worked upon by the method.

The method disclosed by Groche cuts the sheet metal and forms edge flanges by pressing the sheet metal, at the location of the cut, into shape which is a cold working process. The cold working of a metal material increases the hardness of the material (see attached document discussing cold working, in particular page 88 last paragraph) at the location which the work was preformed and no where else along the member. The increase in the hardness at the work site is a result of the method being applied by Groche and increasing the hardness of a guiding element for a rolling member provides the predictable result of prolonging the useful life of the sliding assembly/arrangement.

Regarding claims 15-17 and 25-27, Groche discloses a surface area lying between the two edge flanges and/or partial area of the interior sides facing each other of the two edge flanges forms the at least one guiding surface (the space between the U-shape of Figure 1 creates the guiding surface with the interior of the flanges) for the rolling body (1).

Regarding claim 24, the operation being preformed does not structural limit an apparatus claim and is only a recitation of the intended use of the device. The intended use in this case does not alter the structure of the device. The device of Groche discloses all of the structural limitations and is capable of performing a guiding operation

that includes at least one of a longitudinal guiding operation and a pivoting guiding operation.

Claims 18, 21, 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groche, DE 10039768, in view of Rotthowe, USP 5,242,221.

Regarding claims 18 and 28, Groche discloses all of the claimed subject matter as applied above. Groche also discloses that the at lest one guiding surface (created by interior of flanges) is cross-sectionally arc shaped.

Groche does not disclose that the rolling bodies are spherical in shape.

Rotthowe teaches that the space between flanges which is arc-shape can be used with rolling bodies that are spherical in shape (see Figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Groche and use spherical rolling bodies in the arc-shaped guiding surface, as taught by Rotthowe, since substituting a wheel rolling element for a spherical rolling element yields the predictable result of supporting the slide element in the so that it can move along a rolling body which reduces the friction and prolongs the usable life of the sliding arrangement.

Regarding claims 21 and 31, Groche discloses all of the claimed subject matter as applied above.

Groche does not disclose that an exterior side of at least one of the two flanges forms the guiding surface.

Rotthowe teaches that both interior and exterior sides of flanges (surfaces on 4 engaging balls in Figure 2) can form a guiding surface for a rolling element.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Groche and use the exterior sides of the flanges to for the guiding surface, as taught by Rotthowe, since placing the rolling element on the exterior of the flange and engaging a slide element would yield the predictable result of supporting the slide element in the same manner as the rolling element being located on the interior of the flange and engaging a slide element.

Claims 22, 23 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groche, DE 10039768, in view of Wilmer, USP 2,757,051.

Groche discloses all of the claimed subject matter as applied above.

Groche does not disclose that the two edge flanges at least partially surround a sliding body that forms an internal joint element and wherein both of the interior sides of the two edge flanges face each other and form the guiding surface and line on a common surface of a cylinder.

Wilmer teaches two edge flanges (left and right sides of B) at least partially surround a sliding body (39) that forms an internal joint element and wherein both of the interior sides of the two edge flanges (left and right sides of B) face each other and form the guiding surface and line on a common surface of a cylinder (39 is a cylinder, the common surface is the exterior surface) for the purpose of providing an elongated

bearing with anti-friction characteristic that matches a profile of the sliding member (C1/L15-34).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Grouch and provide for the two edge flanges to at least partially surround a sliding body that forms an internal joint element and wherein both of the interior sides of the two edge flanges face each other and form the guiding surface and line on a common surface of a cylinder, as taught by Wilmer, for the purpose of providing an elongated bearing with anti-friction characteristic that matches a profile of the sliding member.

Response to Arguments

Applicant's arguments filed March 27, 2010 have been fully considered but they are not persuasive.

Applicant argues that Jelenak and Groche do not disclose that the hardness of the flanges is greater than a portion of the member that is not worked upon by the method.

Upon further consideration it is determine that Jelenak and Groche are disclosing a cold working method for forming the flanges. A material change that is a result of cold working is an increase in hardness, see newly cited document. Since Jelenak and Groche disclose a cold working method, the result, at the location being worked upon, is an increase in hardness making the hardness greater than the area not worked upon.

Conclusion

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES PILKINGTON/
Examiner, Art Unit 3656
4/7/10